



Human Information in the Era of Big Data

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Fundamental Change

For the first time in the IT industry, there is a fundamental shift in the “I”: **information in the form of social media, rich media, clickstreams, sensor data, images, email and more.**



Human Information

The ability to extract real value from **human information** is the new currency, but only if enterprises can **analyze and act on 100% of information**.

	Amount	Growth
Unstructured	90%	62%
Standard	10%	22%



Computers Can Now Process Human Information

Keywords and metadata do not solve this problem.

Finally, computers can fit the way people work instead of the other way around.

Welcome to the Human Information Age.

What is the next “twitter” or “Facebook”?

While no one can answer this today, we can confidently say it will have human information as its currency.



Why is Processing Human Information Different?

Human Information is made up of ideas, is diverse, and has context.

Ideas don't exactly match like data does; they have distance.

Information is not static – it's dynamic and lives everywhere.

Meaning is a common currency across all information types.



Social Media



Video



Audio



Email



Texts



Mobile



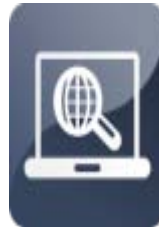
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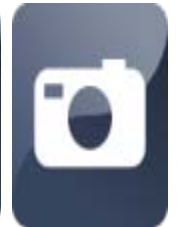
Transactional
Data



Documents



Search Engine



Images

Explosive Growth of Information

Content creation consumption has grown exponentially

3,892,179,868,480,350,000,000

The number of digital information bits created in 2008

Consider YouTube videos:

In four years, video uploads have increased eight-fold

Users upload 35 hours of video every minute

Videos are viewed 2 billion times per day



“...mankind created 150 exabytes (billion gigabytes) of data in 2005. In 2010, it will create 1,200 exabytes - roughly the same as the number of grains of sand on the earth.” “The Data Deluge”, The Economist, February 25, 2010



Trends We're Seeing

- Real-time analysis of human information

- Social media, news media, audio and video
- Electronic communications and customer interactions

twitter



Cisco
webex

You Tube

'By 2014, social networking will replace e-mail for 20% of business users.'

Gartner

- Cloud – more movement of data to the cloud

- We now have 50PB of customer data in the cloud
- Search and analytics against cloud data

LinkedIn

facebook

- Corporate deployment of mobile devices, especially iPads

- Autonomy products including IDOL, WorkSite, TeamSite and Aurasma are all available on mobile devices



The world is not structured into rows and columns



What is the Impact of Human Information on Business

Lack of structure makes it difficult to search or analyze

Doesn't come with metadata built in

Traditionally must be manually tagged

Without metadata, it can be very difficult to locate

Legacy software cannot differentiate between pieces of human information



Big Data

Defining Big Data is a matter of perspective

“Datasets that grow so large that they become awkward to work with using on-hand database management tools. Difficulties include capture, storage, search, sharing, analytics and visualizing. This trend continues because of the benefits of working with larger and larger datasets allowing analysts to spot business trends, prevent disease, combat crime. Though a moving target, current limits are on the order of terabytes, exabytes and zettabytes of data.”

Datasets are constantly growing in size and are gathered more frequently



Legacy Methods and Big Data

Wholly dependent on the capabilities of the organization

If your organization is already set up to manage data in a scalable way,
hundreds of terabytes is not an issue.

For others, even a few hundred gigabytes may require an entirely new data
management strategy.

Parallel software must run on tens, hundreds or thousands of servers



Impact of Big Data: Data Volume

There are a lot of individual data items

Datasets can contain trillions of items

Each data item can be big

Traditional methods deal in kilobytes

Human information can be multiple gigabytes

Data items are being created rapidly

High creation rate puts demands on system resources



It's Big But Is It Clever?

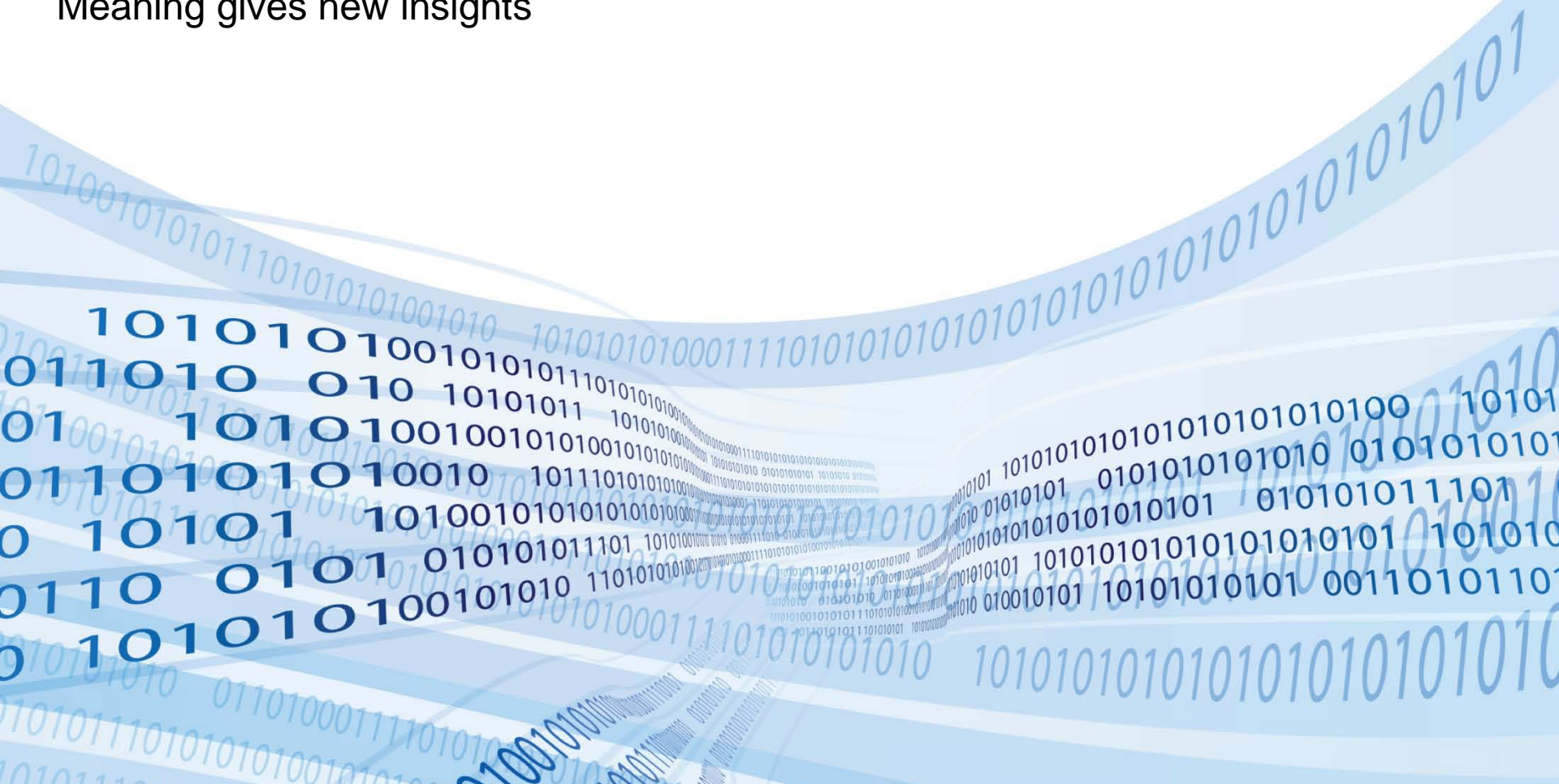
Big data only delivers on its promise if rich meaning can be extracted

Most big data is unstructured

Ignoring the unstructured only addresses 10% of the problem

SQL, Hadoop and InMemory do not give new answers

Meaning gives new insights



A Meaning Based Approach to Big Data

Single access layer across the enterprise

Processes structured, semi-structured and unstructured data

Makes it possible to relate all information, regardless of the original format

Information resides in its original location, no need for copies, and access to all enterprise applications

Understands the meaning and context of all data

Phone calls can be related to conceptually similar emails, documents, or IMs

Applies policies, runs analytics and automates processes in real-time



The IT industry handles 10%
of the problem, we do 100%



One Platform: 500+ Functions & 400+ Connectors



Big Data



Social Graphing



Information Governance




Sentiment Analysis














Cross and Up sell




AUTONOMY
Next Generation Platform – IDOL 10



Over 400 Connectors



Social Media Video Audio Email Texts Mobile Transactional Data Documents IT/OT Search Engine Images



Appliance



Software



OEM



Cloud



Mobile

Protecting the enterprise

***Archiving
Analytics
Compliance
E-Discovery
Governance
Legal Hold
Policy
Records Management
Social Media***

SOFTWARE CLOUD HYBRID

Promoting the enterprise

***Customer Optimization
Contact Center
Multi-channel integration
Multi-channel Analytics
Revenue Optimization
Rich Media Management
Social Media
Web Content Management***

SOFTWARE CLOUD HYBRID

Verticals

***Energy
E-Commerce
Financial Services
Government
Healthcare
Information Technology
Legal
Manufacturing
Media
Pharmaceutical***

SOFTWARE CLOUD HYBRID

Powering the enterprise

***Analytics
Pan Enterprise Search
Database Archive***

SOFTWARE

***Automation
Big Data SQL***

CLOUD

***Backup and Recovery
BPM***

HYBRID



OEM

Conclusion

HP is the only provider of software that processes Human Information:

Autonomy can understand, manage and analyze Big Data

IDOL provides one platform for all functions and powers all Autonomy products

Trusted and proven with the most demanding global customers

Significant ROI through automation

Greater control, access and management of information



Thank you

